

State of Washington Department of Ecology Office Of Columbia River Report of Examination for Sullivan Lake Water Supply Permit

File NR G4-35176 WR Doc ID 4500132

PRIORITY DATE 5/2/2008	APPLICATION NUMBER G4-35176
MAILING ADDRESS CITY OF BRIDGEPORT PO BOX 640	SITE ADDRESS (IF DIFFERENT)
BRIDGEPORT, WA 98813	

Quantity Authorized for Withdrawal or Diversion						
WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)				
2 813	GPM	1 100				

REMARKS: Consistent with the Settlement Agreement between Ecology and the City of Bridgeport (City), (Douglas County Superior Court Cause No. 10-2-00188-1), the limits above are the total quantity the City is authorized to use for Municipal Water Supply purposes. The City may withdraw the full annual quantity from a combination of any of the sources identified herein, so long as the collective instantaneous withdrawal rate does not exceed 2,813 gallons per minute.

Purpose							
	WITHDRAV	WITHDRAWAL OR DIVERSION RATE ANNUAL QUANTITY (AF/YR)					
PURPOSE	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	(mm/dd)	
Municipal Water Supply	1,213	1,600	GPM	600	500	01/01 - 12/31	

Source Location									
COUNTY	WAT	WATERBODY			TRIBUTARY TO WATER R		R RESOURCE INV	RESOURCE INVENTORY AREA	
DOUGLAS GROUNDWATER		GROUNDWATER					50-FOSTI	ER	
SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE	
Well 1	03300400000	AGJ126 2	29N	25E.W.M.	15	SW NE	48.01227	-119.67535	
Well 2	00400000021	AGJ127 2	29N	25E.W.M.	14	SWSW	48.00832	-119.66845	
Well 3	03100600100	AGJ128 2	29N	25E.W.M.	23	NWNW	48.00234	-119.66404	
Planned Well		2	29N	25E.W.M.	14	SWSW	Well not yet	drilled	
							Datum: NAD	83	

Place of Use

PARCELS (NOT LISTED FOR SERVICE AREAS)

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

Proposed Works

The proposed water use is associated with an existing need for additional water to support the 20 year growth projection of the City of Bridgeport. The City will use new and existing infrastructure to supply water for increased development within the city and an expansion of their current system will allow for an increase to the

number of authorized service connections.

Development Schedule		
BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
February 15, 2013	February 15, 2032	February 15, 2033

So long as the City is proceeding with the development of the water right with due diligence, Ecology will consider extensions of the City's development schedule consistent with future water system planning submitted by the City to the Washington State Department of Health.

Measurement of Water Use

How often must water use be measured? Weekly

How often must water use data be reported to Ecology? Annually (Jan 31)
What volume should be reported? Total Annual Volume

What rate should be reported? Annual Peak Rate of Withdrawal (gpm or cfs)

Provisions

Water Service Contract

Use of water under this permit or certificate is contingent upon the applicant's compliance with a water service contract with Ecology for recovery of costs associated with the Sullivan Lake Water Supply Project. Failure to comply with the terms of the water service contract may result in cancellation of the permit or voluntary relinquishment of the certificate.

Wells, Well Logs and Well Construction Standards

All wells constructed in the state shall meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard shall be decommissioned.

All wells shall be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag shall remain attached to the well. All water measuring reports submitted to Ecology must reference this tag number.

Installation and maintenance of an access port as described in WAC 173-160-291(3) is required.

Measurements, Monitoring, Metering and Reporting

An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Central Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Central Regional Office for forms to submit your water use data.

Department of Health Requirements

Prior to any new construction or alterations of a public water supply system, the State Board of Health rules require public water supply owners to obtain written approval from the Office of Drinking Water of

the Washington State Department of Health. Please contact the Office of Drinking Water prior to beginning (or modifying) your project at DOH/Division of Environmental Health, 16201 E. Indiana Avenue, Suite 1500, Spokane Valley, WA 99216, (509) 329-2100.

Water Use Efficiency

The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by RCW 43.21B and WAC 371-08. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology	Department of Ecology
Attn: Appeals Processing Desk	Attn: Appeals Processing Desk
300 Desmond Drive SE	PO Box 47608
Lacey, WA 98503	Olympia, WA 98504-7608
Pollution Control Hearings Board	Pollution Control Hearings Board
1111 Israel RD SW, Ste 301	PO Box 40903
Tumwater, WA 98501	Olympia, WA 98504-0903

For additional information visit the Environmental Hearings Office Website: http://www.eho.wa.gov. To find laws and agency rules visit the Washington State Legislature Website: http://www1.leg.wa.gov/CodeReviser.

Signed at Yakima, Washington, this	day of	2013.
Derek I. Sandison, Director Office of Columbia River		

INVESTIGATOR'S REPORT Application for Water Right – City of Bridgeport Water Right Control Number G4-35176 Trevor Hutton, Department of Ecology

BACKGROUND

Description and Purpose of Proposed Application

The Washington State Department of Ecology (Ecology) accepted Water Right Application Number G4-35176 submitted by the City of Bridgeport (City). Attributes of the City's application for a water right permit are presented below in Table 1.

On April 4th, 2012, the applicant was notified during a meeting in Bridgeport of the availability of mitigation water for this application, developed by the Office of Columbia River. The City was informed that they were eligible for two potential mitigation sources, the Lake Roosevelt Incremental Storage Releases Program and the Sullivan Lake Water Supply Project (Project). At that time, it was unclear which mitigation source would be used to offset the City's proposed use. On April 20, 2012 the City was notified by mail that Ecology was adopting the April 4th date as the notification of Ecology's intent to process the instant application pursuant to paragraph 2 in the "Stipulation" section of the Stipulation and Agreed Order of Stay entered in *City of Bridgeport v. Department of Ecology*, Douglas County Superior Court No. 10-2-00188-1. On May 15, 2012, the City indicated that if given the choice, they would rather receive water from Sullivan Lake under the Project than from the Lake Roosevelt Program.

Lands covered by the proposed place of use are owned by multiple property owners within the City's service area under its water system plan approved by the Department of Health. The lands upon which the proposed points of withdrawal are located are owned by the City.

The proposed water use is associated with an existing need for additional water to support the 20 year growth projection of the City. The City will use new and existing infrastructure to supply water for increased development within the city and an expansion of their current system will allow for an increase to the number of service connections authorized under its water system plan.

Table 1 Application Summary

Name	City of Bridgeport		
Priority Date	,		
Instantaneous Rate	2,250 gallons per minute (gpm)		
Annual Quantity	3,000 acre-feet per year		
Purpose(s) of Use	Municipal Water Supply		
Period of Use	Continuous		
Place(s) of Use	Authorized Service Area for City of Bridgeport		

Table 2 Proposed Sources of Withdrawal or Diversion

Source Name	Parcel	WellTag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Well 1	03300400000	AGJ126	29N	25E.W.M.	15	SW NE	48.01227	-119.67535
Well 2	00400000021	AGJ127	29N	25E.W.M.	14	SWSW	48.00832	-119.66845
Well 3	03100600100	AGJ128	29N	25E.W.M.	23	NWNW	48.00234	-119.66404
Planned Well			29N	25E.W.M.	14	SWSW	Well not	yet drilled

Table 3 Existing Municipal System Summary

Department of Health Water System Database	
Water System ID	08350
Residential Population	2,409
Non-Residential Population	0
Total DOH Approved Connections	935
Distribution Capacity	500,000 gallons

Legal Requirements for Approval of Appropriation of Water

Chapters 90.03 and 90.44 RCW authorize the appropriation of public water for beneficial use and describe the process for obtaining water rights. Laws governing the water right permitting process are contained in RCW 90.03.250 through 90.03.340 and RCW 90.44.050. In accordance with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for a water right permit to be approved:

- Water must be available
- There must be no impairment of existing rights
- The water use must be beneficial
- The water use must not be detrimental to the public interest

Public Notice

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted and used. Notice of this application was published in the Wenatchee World on May 10 and 17, 2012.

Consultation with the Washington Department of Fish and Wildlife

Ecology must give notice to the Washington Department of Fish and Wildlife (WDFW) of applications to divert, withdraw or store water (RCW 77.57.020).

On January 31, 2013, Ecology received a comment document from WDFW regarding this application. The letter generally identified the mitigation as being sufficient to address concerns by WDFW on potential impacts to streamflows and aquatic species.

Consultation under WAC 173-563-020

Under WAC 173-563-020(4), consultation with "appropriate local, state, and federal agencies and Indian tribes" is required before new Columbia River water right permits may be issued:

The instream flows established and implemented by this chapter for instream and out-of-stream uses, and the average weekly flows applied by this chapter to out-of-stream uses do not apply to any application for water from the main stem Columbia River on which a decision is made by the department of ecology on or after July 27, 1997. Any water right application considered for approval or denial after that date will be evaluated for possible impacts on fish and existing water rights. The department will consult with appropriate local, state, and federal agencies and Indian tribes in making this evaluation. Any permit which is then approved for the use of such waters will be, if deemed necessary, subjected to instream flow protection or mitigation conditions determined on a case-by-case basis through the evaluation conducted with the agencies and tribes.

On November 7, 2012, Ecology contacted local, state, and federal agencies and Indian tribes requesting consultation and comments on issuing new permits from the Columbia River mitigated by 14,000 acrefeet of water under the Project. Parties were notified by mail. A list of those individuals included in this mailing is available in the file.

From these consultations, Ecology only received a written response from the WDFW, which supports the development of new water supplies under the Project. WDFW also encouraged Ecology to consult with fish managers on the timing of releases. This consideration has been addressed previously in the planning process for the Memorandum of Agreement (MOA) for the Project, which included input from WDFW, and Ecology will release water in a manner consistent with the terms set forth in the MOA.

State Environmental Policy Act (SEPA)

On April 8, 2011, in compliance with the National Environmental Policy Act (NEPA), the Federal Energy Regulatory Commission (FERC) published a Draft Environmental Impact Statement (EIS) for two related projects: 1) a relicense application of Boundary Dam on the Pend Oreille River by Seattle City Light, and 2) a license surrender application for Sullivan Dam by the Pend Oreille County Public Utility District (PUD). The applications were causally linked by mitigation measures that Seattle City Light proposed for its relicensing that were located at Sullivan Lake. Ecology offered comments to FERC on the project, both during scoping of the EIS and on the draft EIS, which were generally incorporated by FERC into the EIS.

On September 21, 2011, Seattle City Light and the PUD, each acting as lead agency for their respective project actions, adopted the FERC EIS via a SEPA Notice of Adoption (see water right file S3-30635). Copies of the environmental documents can be obtained from Ecology's website^[1].

Project specific SEPA compliance

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

- It is a surface water right application for more than 1 cubic foot per second (cfs). If the
 project is for agricultural irrigation, the threshold is increased to 50 cfs, so long as the
 project will not receive public subsidies;
- It is a groundwater right application for more than 2,250 gallons per minute (gpm);
- It is an application combined with other water right applications for the same project and exceeds the amounts above;
- It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
- It is part of a series of exempt actions that, considered together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

INVESTIGATION

On April 4, 2012 the author visited with city officials in Bridgeport regarding this application. At that time, various mitigation options and timelines were discussed. Also discussed was the existing

^[1] http://www.ecy.wa.gov/programs/wr/cwp/sullivan.html.

Stipulation and Agreed Order of Stay in *City of Bridgeport v. Department of Ecology*, Douglas County Superior Court No. 10-2-00188-1, between the City and Ecology (Agreement). The Agreement is a result of litigation brought by the City over a dispute regarding Ecology's interpretation of the City's authorized annual quantity limitation under its water rights. In order to avoid the costs and time involved in litigation, both parties agreed to several stipulations regarding the City's existing water rights, and the future processing of the subject water right application. The Agreement clearly defines the 20 year demand figures and connection limitations by the Department of Health, and identifies the quantities necessary to resolve the existing litigation. The quantities and limitations set forth in the Agreement will be supported in the analysis and processing of this application.

Water Availability

For water to be available for appropriation, it must be both physically and legally available.

Legal Availability

The Project involves release and retiming of water stored in Sullivan Lake under the PUD's June 26, 1907 claim (Claim Number 300245 - as changed by Certificate of Change Vol. 2 Page 817), which asserts a right to storage of 31,209 acre-feet in Sullivan Lake. These releases would be timed to enhance stream flows in the Pend Oreille and Columbia Rivers during periods of reduced water availability for instream and out-of-stream uses. This retiming will benefit flow and habitat conditions for resident and anadromous fish as well as providing water for new out-of-stream uses.

Surface Water Permit Number S3-30635 serves as the secondary use permit authorizing use of water stored in Sullivan Lake, and was issued on November 22, 2011 to the PUD, authorizing a maximum of 225 cfs, 31,209 acre-feet per year for year-round in-lake fisheries, recreation, and aesthetics. Surface Water Permit Number S3-30635 also authorizes a maximum of 225 cfs and 26,000 acre-feet per year of downstream releases for instream flow, power generation and mitigation purposes. While the priority date for said permit is March 4, 2011, new appropriations will be regulated under the June 26, 1907 date for the PUD's storage right used as mitigation.

As water is released and perfected consistent with the MOA, Ecology will incrementally issue Superseding Certificate of Trust Water Right S3-30635, ultimately accepting 225 cfs, 26,000 acre-feet per year to the Washington State Trust Water Right Program (TWRP) for the purpose of instream flow. Under Superseding Certificate of Trust Water Right S3-30635, 14,000 acre-feet of water will be held in the TWRP to mitigate the impacts of 9,333 acre-feet of new state water rights issued under the Project for new out of stream uses. This change to the existing secondary use permit is pending the PUD's release of water for the purposes of instream flow and mitigation according to the delivery schedule outlined in the 2010 MOA. The water rights issued under the Project will be permanent in nature and should any renegotiation of the terms between the PUD and the United States Forest Service (which requires a Special Use Permit for use of the land) occur, OCR will ensure that suitable mitigation remains in place to satisfy existing water rights.

Until Superseding Certificate of Trust Water Right S3-30635 issues, OCR will mitigate the subject application through water currently available under the Lake Roosevelt Incremental Storage Releases Program. This water will serve as a substitute source of mitigation pending the release of water under the Project in 2013. The allocation requirements in the Final Supplemental Environmental Impact Statement for the Lake Roosevelt Incremental Storage Releases Program support the legal availability of Lake Roosevelt water to provide a substitute for water forthcoming from Sullivan Lake under the Project. In the unlikely event that Lake Roosevelt Program water becomes the permanent source of mitigation for this authorization, the City and Ecology will execute a new water service contract. At that

time, Ecology will evaluate the City's eligibility for reduced annual payment amounts consistent with the hardship criteria set forth in the Lake Roosevelt Program.

Physical Availability

New water uses associated with the Project will divert or withdraw water from the Columbia River or tributary groundwater on a continuous, year round basis. Mitigation releases will take place consistent with the framework laid out in the Settlement Agreement, MOA, and Secondary Use Permit.

Table 4 Increased flows as a result of Sullivan Lake reoperation

		y Year	Wet Year			_	
Period	Flow	Increase	Flow Increase		Monthly Total		
	cfs	acre-feet	cfs	acre-feet	Dry (acre-feet)	Wet (acre-feet)	
June Week 1	40	560	50	700			
June Week 2	40	560	50	700			
June Week 3	40	560	50	700			
June Week 4	40	720	50	900	2400	3000	
July Week 1	30	420	30	420			
July Week 2	25	350	25	350			
July Week 3	20	280	20	280			
July Week 4	20	400	20	400	1450	1450	
August Week 1	20	280	20	280			
August Week 2	20	280	20	280			
August Week 3	20	280	20	280			
August Week 4	20	400	20	400	1240	1240	
September Week 1	20	280	20	280			
September Week 2	170	2380	190	2660			
September Week 3	210	2940	210	2940			
September Week 4	210	3780	210	3780	9380	9660	
Total (June-Aug)					5090	5690	
Total (June-Sept)					14470	15350	

The new lake management plan adopted by the parties in the Settlement Agreement strikes a balance between diverse in-lake and downstream interests. The following table summarizes the proposed future uses identified in the PUD's application under the new lake management plan.

Table 5 Proposed Beneficial Uses

Table 5 : Toposea Beneficial eses			
Proposed Use	Rate (cfs)	Volume (acre-feet)	Period of Use
In-Lake Recreation, Aesthetics and Resident Fisheries	0	31,209	Continuous
Mitigation for Out-of-Stream Uses	210	14,000 ¹	6/1 to 9/30
Instream Flow (Downstream)	225	26,000	6/1 to 12/31
Recreation (Downstream)	225	26,000	6/1 to 12/31
Hydropower (Downstream)	225	26,000	6/1 to 12/31

¹ The 14,000 acre-feet is allocated 2/3^{rds} for out-of-stream uses and 1/3rd for instream uses. However, some instream benefit also accrues for the 9,333 acre-feet of out-of-stream use as the applicants whose uses will be mitigated by Ecology trust water holdings are downstream of Sullivan Lake.

The subject application is being investigated under the mitigation framework established under the MOA. In order to mitigate the impacts of any new appropriation of water on the Columbia River, hydrologic evidence must indicate that impacts on the Columbia River associated with the proposed water use would be successfully mitigated by the Sullivan Lake releases. Through the consultation process, no questions arose as to the suitability of the proposed mitigation and it is assumed that the mitigation will provide adequate protection to aquatic species and other water rights.

A licensed Ecology staff hydrogeologist produced or reviewed and stamped a separate technical memorandum which discusses the hydrogeologic analysis for this application. The hydrogeologic interpretations provided below are extracted from this memorandum.

There are no known hydrogeologic barriers between the Columbia River and the City's existing wells. Recharge of the unconsolidated aquifer occurs from contributions of precipitation and to a larger degree surface water exchange with the Columbia River when and where the hydraulic head (elevation) of the river is above that of the groundwater. Discharge of groundwater from the aquifer is to wells and to the Columbia River when and where the hydraulic head of the aquifer is above the surface elevation of the river. Well log data suggests that the water levels in the unconsolidated aquifer correlate with the surface elevation of the Columbia River.

The unconsolidated sedimentary nature of the aquifer, lack of hydraulic barriers between the wells and the river, correlative head levels, recharge and discharge relationships, and close proximity of the subject wells to the river all support a conclusion that the groundwater aquifer, into which the subject wells are completed, is in close hydraulic communication with the Columbia River. As a result, the proposed withdrawal can be mitigated by releases of water from Sullivan Lake during the period when water is physically available to the proposed withdrawal facilities.

The nature of the hydrogeologic environment for this application also satisfies the allocation requirements for water received out of Lake Roosevelt as outlined in the Final Supplemental Environmental Impact Statement for the Lake Roosevelt Incremental Storage Releases Program, and water is physically available from Lake Roosevelt releases until replaced by Project water.

Impairment Considerations

Columbia River Water Rights

An investigation of a water right application includes an analysis of whether the proposed water use will impair other existing water rights. The impairment analysis involves identifying how the proposed water use may impact the current water rights regime.

In considering impacts to existing water right holders and the instream flow rule, an analysis must consider actual river operation, particularly in drought years when water availability issues are most acute. In the context of this application, there are five classes of water uses that must be considered:

- Columbia River water right holders with priority dates senior to June 26, 1907.
- Uninterruptible water rights with priority dates junior to June, 26, 1907.
- Interruptible water rights with priority dates junior to June 26, 1907.
- The June 24, 1980 Instream Flow Rule (WAC 173-563).
- Proximate groundwater right holders with priority dates senior to the subject application.

² Although the priority date of this application is May 2, 2008 based on the date of filing with Ecology, the application is backed by mitigation with a priority date of June 26, 1907, which is how it will be managed if regulation of Columbia River water rights is required.

A detailed analysis of the current water rights regime on the Columbia River was issued in the Report of Examination (ROE) for S3-30635.

Under the Project, 14,000 acre feet per year of mitigation water will be held in the TWRP for instream purposes under the forthcoming Trust Water Certificate S3-30635 with a priority date of June 26, 1907, 9,333 acre-feet of which may be used for mitigation of new out-of-stream uses. Under the State's priority system, the mitigation water is senior to all water rights issued after June 26, 1907. Additionally, the mitigation water is protected under the TWRP from diversion by junior water right holders who may be curtailed during low-flow years. These junior uses total approximately 379 interruptible water rights which are subject to curtailment based on a forecast methodology outlined in WAC 173-563. Although junior to the mitigation that is available for this application, no conflict is expected between the applicant's diversions or withdrawals and interruptible water users because of the mitigation provided by the Project. As such, this water right would not be subject to existing instream flow regulations and will be managed under the regulatory priority date of the Sullivan Lake storage right, June 26, 1907.

From the Staff Hydrogeologist's Report:

During those times when water released from Sullivan Lake is not physically available at the withdrawal facilities there will be impacts to flows in the river. However, determining whether any specific water right will be impaired by the proposed withdrawal is difficult and must be addressed in the context of water availability. Based on the information and analysis presented above, the following conclusions can be made regarding water availability as it relates to impairment.

- The critical time of the year for flows on the Columbia River occurs in July and August. However, changes in river operations and the development of incremental water release projects such as Sullivan Lake and Lake Roosevelt have increased water availability during the critical flow periods. As a result, more water is available during these critical periods for fish and out-of-stream uses than was historically available.
- All of the water rights on the Columbia River have historically, with the exception of 2001, received a full supply of water every year. With an increase in water availability, due to incremental release programs such as Sullivan Lake and Lake Roosevelt, during the period of April through September, it is unlikely that impairment of any existing water right (surface or ground) will occur.

Water Rights in the Vicinity

There are approximately five other water rights in the area. The largest of these are held by the Bridgeport Irrigation District, who holds two claims for irrigation water in and around Bridgeport. Changes to Water Right Claim numbers 138276 and 138277 cumulatively total 7.5 cfs and 1698.5 acrefeet per year from the Columbia River for the irrigation of 356 acres. There are three State issued water rights that share a portion of the place of use with the subject application. These include a 1973 priority groundwater Certificate held by Wilbur Conklin for the irrigation of 20 acres, a 1974 priority surface water Certificate held by Martyn Rillet for stockwatering and a 1988 priority surface water permit held by the US Corps of Engineers for 13 acres of irrigation adjacent to Chief Joseph Dam. The closest point of withdrawal for any State issued water right is approximately 0.7 miles northwest of the closest proposed point of withdrawal.

From the Staff Hydrogeologist's report:

If approved, the proposed use under Application G4-35176 would add 600 acre feet per year (af/yr) and 1,213 gallons per minute (gpm) to the city's existing water right portfolio for a total

water right portfolio of 1,100 af\yr and 2,813 gpm. In order to evaluate possible well interference as a result of drawdown of the groundwater within the unconsolidated sedimentary aquifer, a worst-case scenario was modeled using the Theis non-equilibrium equation, corrected for unconfined conditions, and the parameters listed below.

Modeled Parameters:

Pumping Rate – 2,813 (gpm)

Annual quantity – 1,100 (af)

Hydraulic Conductivity – 3,700 to 6,700 (gallons per day per square foot)

Saturated Thickness – 50 (feet)

Aquifer Specific Yield – 0.15 (dimensionless)

Pumping continuously at a rate of 2,813 gpm from a single well would exhaust the authorized annual quantity in approximately 88 days. Results indicate that pumping at a rate of 2,813 gpm for 88 days would potentially draw the water table down around 6 to 10 feet at a distance of 500 feet from the pumping well. At 2,000 feet, the estimated distance to the nearest well not owned by the city, the modeled drawdown would be 3 to 4 feet. If the well is pumped in cycles or if it is pumped at less than the instantaneous rate of 2,813 gpm, the predicted drawdown effect would be reduced.

There is only one other state-issued groundwater right, within the same aquifer and on the same side of the Columbia River as the subject wells, authorized to withdraw water from the same aquifer as the subject wells. Based on the analysis presented above, any groundwater drawdown that might occur as a result of the permitting action is not expected to interfere with the ability of nearby well owners to fully utilize their well(s).

Beneficial Use

Beneficial use encompasses two principal elements of a water right:

- 1. Beneficial use refers to the purpose for which water may be used.
- 2. Beneficial use determines the measure of a water right. The owner of a water right is entitled to the amount of water necessary for the purpose to which it is used.

The use of water for municipal water supply purposes is defined in statute as a beneficial use (RCW 90.54.020(1)).

To determine the amount of water necessary for a beneficial use, courts have developed the principle of "reasonable use". Reasonable use of water is determined by analysis of the factors of water duty and waste.

Currently, the City holds a total of 3 water rights. Ecology's interpretation is that these water rights cumulatively authorize the use of 1,600 gallons per minute, 500 acre-feet per year. Stipulation number one of the Agreement states that:

"Ecology shall accept the 20-year use projection in the City's water System Plan, approved by the Department of Health (DOH) on December 2, 2010 and amended on March 24, 2011 (primarily Table 2.6 estimating a yearly demand of approximately 1,099 acre-feet in 2027) as a reasonable demand estimate for purposes of acting on the application."

The instant application proposes to withdraw 2,250 gpm and 3,000 acre-feet per year. These quantities, combined with currently authorized rights, are in excess of the quantities laid out in the Agreement. As

such, the annual quantity considered for this application will be 600 acre-feet per year, which when combined with the 500 acre-feet per year authorized previously totals 1,100 acre-feet per year, satisfying the terms of the Agreement. Stipulation number five states that additional instantaneous withdrawal rates shall be sufficient to deliver the annual quantity of water and shall be additive to existing instantaneous rate of 1,600 gpm. The instantaneous rate required to withdraw 600 acre-feet per year is approximately 372 gpm. As the City grows, it is expected that the peak hourly demand will rise to levels above their current authorized maximum, and this growth should be addressed through the subject application to avoid further water rights deficiencies in the future. Table 2.6 in the City's Water System Plan identifies that the peak hourly demand at the end of the 20 year growth period will be 2,813 gpm. This rate, minus their existing rate of 1,600 gpm would equate to a new allocation of 1,213 gpm additive to existing water rights. The quantity and pumping rate requested by the City are reasonable estimates of use in keeping with their existing use projections. Water use will be documented through metering and evaluated at that time that a Proof of Appropriation examination is completed prior to issuance of a certificate.

Public Interest Considerations

Analysis of whether this application meets the requirements of RCW 90.03.290, that the proposed use of water will not be detrimental to the public welfare, involves investigation of how the approval of the proposed use of water would affect the range of values that are encompassed by the public interest.

Several sections of statute list the legislative policies that guide the consideration of the public interest during the allocation of water, including sections of the 1971 Water Resources Act (Chapter 90.54 RCW) and Chapter 90.90 RCW titled "Columbia River Basin Water Supply".

An analysis of the public interest considerations for the Project is contained in the Report of Examination for Application Number S3-30635, the "secondary use" permit for the Sullivan Lake releases.

The public interests associated with the Project's new water right permitting are specifically cited in several sections of Chapter 90.90 RCW.

- RCW 90.90.005(1) states "The legislature finds that a key priority of water resource
 management in the Columbia river basin is the development of new water supplies that includes
 storage and conservation in order to meet the economic and community development needs of
 people and the instream flow needs of fish".
- RCW 90.90.005(2) directs Ecology to "aggressively pursue the development of water supplies to benefit both instream and out-of-stream uses".
- RCW 90.90.020(3)(b) instructs Ecology to focus on "Sources of water supply for pending water right applications".
- RCW 90.90.020(3)(d) instructs Ecology to focus on "New municipal, domestic, industrial, and irrigation water needs within the Columbia river basin".
- RCW 90.90.110 provides that Sullivan Lake releases will benefit water users in the 6 legislatively authorized northeast counties.

The Project's municipal, domestic and industrial permitting achieves the statutorily mandated public interest requirements by allowing new state water rights to be issued while mitigating the impacts to fish.

If the subject application is approved, the public welfare may be affected in several ways:

- The provision of additional water supplies for municipal and domestic water supply accommodates the projected population growth in the region, allowing for increased economic and social opportunities.
- The use of water is not expected to affect local cultural, recreational, or environmental resources.
- The mitigation releases have been agreed to by interested parties as a part of the Settlement
 Agreement and provide that 1/3 of the water remains instream for fish and habitat benefit.
 Additionally, water allocated in lower reaches of the Columbia will further increase stream flows
 in the intervening reach between Sullivan Lake and the point of diversion. Increased instream
 flows are beneficial for Endangered Species Act-listed salmon and steelhead species in the
 Columbia River.

The benefits indicated above provide evidence that on the individual and programmatic level, processing of this application will not be detrimental to the public interest.

Consideration of Protests and Comments

On September 22, 1997, The Center for Environmental Law & Policy (CELP) submitted written comments to Ecology requesting that Ecology "either deny or continue in hold status all applications for new water rights from the Columbia River, its tributaries and from any ground water source in continuity with them." Major concerns cited by CELP include impacts to Endangered Species Act listed fish stocks, water availability, and reduced revenue from hydropower facilities as a result of increased diversions. CELP asserted that issuance of new water rights would violate the four statutory criteria for issuance of a water right because water is not available, and issuance of new rights would lead to impairment of existing rights and would not be in the public interest.

The Office of Columbia River has addressed these concerns through mitigation measures proposed as a part of the Project. During the planning process for the Project, federal, state, local and individual entities were consulted regarding the suitability of the proposed mitigation. Issuance of new water rights for pending applications is mitigated by existing water rights held in Sullivan Lake to be released yearly for instream flow as outlined in the MOA.

This Project will have a beneficial impact on ESA-listed fish by providing additional instream flow in the quantity of 26,000 acre-feet each year. Water will be released from Sullivan Lake on a schedule agreed upon in collaborative meetings with interested parties prior to executing the MOA and will not impair other appropriators with existing rights. Project water will only be used to permit uses of water where the proposed mitigation is deemed adequate by Ecology staff.

Under the Project as authorized by RCW 90.90.110, water is allocated to supply water for new out of stream uses in Douglas, Ferry, Lincoln, Okanogan, Pend Oreille, and Stevens counties. As described in the public interest section, the project will generate new jobs, revenue and other economic benefits to individuals and communities throughout the Columbia River Basin, while providing mitigation for fisheries.

Conclusions

Beneficial Use

The proposed use of water for municipal water supply is considered to be a beneficial use. Therefore this application meets the first criterion of RCW 90.03.290 that the water be put to beneficial use. While the application proposed up to 3,000 gpm and 3,000 acre-feet per year, the allocation is being reduced to align with the City's 20 year growth projection. 1,213 gpm and 600 acre-feet per year represents a reasonable demand for water and is in keeping with the Agreement.

Water Availability

The analysis provided above demonstrates that water is physically and legally available for the proposed use of water.

Impairment

The proposed beneficial use of water will not impair any existing water rights.

Public Interest

The proposed use of water would not be detrimental to the public welfare when reduced to align with the 20 year growth projection as outlined in the Agreement.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved and a permit be issued in the amounts and within the limitations listed below and subject to the provisions listed above.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

1,213 gpm 600 acre-feet per year Municipal Water Supply

Points of Withdrawal

As listed on Page One of this Report of Examination.

Place of Use

As listed on Page One of this Report of Examination.

Report Writer Date

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